March 25, 1950.

Dr, Max Zelle,
5634 Greentree Road,
Bethesda, Maryland.

Dear Max:

As I promised quite some time ago, I've finally managed to hack out a rough draft which comprises my idea of a short paper for J. Bact. This is intended as a notification of the single-celledness of diploid cultures, for I thought it would be best to defer a necessarily rather sophisticated account of the pedigree details for a later, more involved publication in something like Genetics, or Proc. Nat. Acad. Sci. The way things are going, it may be some time yet before we will be ready for the latter. Do you agree? I've done this MS in this detail only because I know that you must be too busy to be able to get down to this kind of drudgery very often.

Anyhow, here's the proposed draft — let me know what you think. I don't have another copy, except of ~~Rhgxx2~~ table 1 and Fig. 1.

I've had some hints lately that the pH of the medium may influence the frequency of segregation, possibly in such a way that at lower pH's you may get less crossing-over. I would recommend not using glucose (if you do now) in the broth ~~to~~ which the isolates are transferred, and possibly keeping this in mind in planning the medium in which the pedigrees are growing.

ut more fre-
uent segr.

H-226, very infrequently, exhibits some sort of autogamy, eg., it goes from Lac v Mal v Xyl v to Lac v Mal- Xyl-... The Mal locus, at least, has become homozygous, by the reverse mutation test. It can't be merely mutation from Mal+ to Mal-, since Xyl and Mtl sometimes go along. It is probably too much to hope for to catch this in a single cell pedigree, but it would be important to be sure that this change is intra-cellular, and not ~~xxxxxx~~ just due to refusion of segregant cells, which however is very unlikely.

There is not much more to be said about the very interesting pedigrees in your 2/5/50 set, except to hope that more like them can be picked up. In the G-12 clone, I think I've already told you that they were all M+ : 103-4: TB_1- Lac-Mal-Xyl-Mtl-; 105-6: Lac- ...+, B_1-; 107-8--like 103-4; and 109-10 TLB_1- Lac- Mal- Xyl- Mtl-. All diploid sibs so far have been typical H226 type. Can you check your notes on 2/5 E. Are the stated relationships of 215 - 222 ok? 215-6 and 221-2 were segr.; the others diploid.

Sincerely,